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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/079,283	02/19/2002	Elena A. Fedorovskaya	83959RLO	7975

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EXAMINER	
CUNNINGHAM, GREGORY F	
ART UNIT	**PAPER NUMBER**
2676	

DATE MAILED: 11/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/079,283	FEDOROVSKAYA ET AL.	
	Examiner	Art Unit	
	Gregory F. Cunningham	2676	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 February 2002*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) *11-20* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-10* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☒ Claim(s) *1-20* are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *19 February 2002* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *2/19/2002*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This action is responsive to communications of application received 2/19/2002.

2. The disposition of the claims is as follows: claims 1 - 20 are pending in the application. Claims 1, 9 and 11 are independent claims.

3. The group and/or Art Unit location of your application has changed. To aid in the correlation of any papers for this application, all further correspondence should be directed to Group Art Unit 2676 (effective 11/05). Please be sure to use the most current art unit number on all correspondence to help us route your case and respond to you in a timely fashion.

4. When making claim amendments, the applicant is encouraged to consider the references in their entireties, including those portions that have not been cited by the examiner and their equivalents as they may most broadly and appropriately apply to any particular anticipated claim amendments.

Election/Restrictions

5. Restriction to one of the following inventions is required under 35 U.S.C. 121:

I. Claims 1-10, drawn to Method to determine affective information, classified in class 345, subclass 421; class 358, subclass 3.04, 3.22; class 382, subclass 151, 209, 219, 288, 289, 291.

II. Claims 11-20, drawn to System for providing affective information, classified in class 345, subclass 581.

The inventions are distinct, each from the other because of the following reasons:

Because these inventions have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Group II, restriction for examination purposes as indicated is proper.

6. During a telephone conversation with Raymond (Registration Number: 22,363) on 11/17/2005 a provisional election was made with traverse to prosecute the invention of Group I, claims 1-10. Affirmation of this election must be made by applicant in replying to this Office action. Claims 11-20 withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Specification

7. The incorporation of essential material in the specification by reference to an unpublished U.S. application, foreign application or patent, or to a publication is improper. Applicant is required to amend the disclosure to include the material incorporated by reference, if the material is relied upon to overcome any objection, rejection, or other requirement imposed by the Office. The amendment must be accompanied by a statement executed by the applicant, or a practitioner

representing the applicant, stating that the material being inserted is the material previously incorporated by reference and that the amendment contains no new matter. 37 CFR 1.57(f).

8. The disclosure is objected to because of the following informalities:

A. In para [0001], first underlined blank space should be "10/036,157 filed 12/26/2001".

B. In para. [0001], second underlined blank space should be "10/079,646 filed 2/19/2002".

C. In para. [0113], first underlined blank space should be "10/079,646 filed 2/19/2002"

D. In para. [0113], second underlined blank space should be "10/079,284 filed 2/19/2002"

Appropriate correction is required.

9. The attempt to incorporate subject matter into this application by reference to application(s) listed in paragraphs [0001] and [0113] is ineffective because those applicable portions of this application that require specific information from said referenced document(s) should be given their full discourse within the Detailed Description of the Invention of this application and rest on neither guesswork nor a hunting expedition for interpretation.

The incorporation by reference will not be effective until correction is made to comply with 37 CFR 1.57(b), (c), or (d). If the incorporated material is relied upon to meet any outstanding objection, rejection, or other requirement imposed by the Office, the correction must be made within any time period set by the Office for responding to the objection, rejection, or other requirement for the incorporation to be effective. Compliance will not be held in abeyance with respect to responding to the objection, rejection, or other requirement for the incorporation to be effective. In no case may the correction be made later than the close of prosecution as defined in 37 CFR 1.114(b), or abandonment of the application, whichever occurs earlier.

Any correction inserting material by amendment that was previously incorporated by reference must be accompanied by a statement that the material being inserted is the material incorporated by reference and the amendment contains no new matter. 37 CFR 1.57(f).

Claim Objections

10. Claim 10 is objected to because of the following informalities: "wherein the 1". Appropriate correction is required.

Claim Rejections - 35 USC § 112

11. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

12. Claim 8 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The nature of the prepositional phrase "in separate digital image files" in relation to "each of the plurality of digital images" and "with the corresponding digital image" renders the claim indefinite since it is not clear as to whether the "separate digital image files" are separate from the original digital images or wherein 'each digital image with stored degree of interest' is separate from each other.

Claim Rejections - 35 USC § 101

13. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

14. Claims 1-10 are rejected under 35 U.S.C. 101 because the disclosed invention is inoperative and therefore lacks utility.

A. There is no practical or sufficient universal evidence supporting a sustainable correlation between the duration a user views a digital image and affective information for that digital.

However, as is well known, there is a generally accepted relation that the duration a user views a digital image is proportional to the complexity of said digital image. Wherefore the user is merely required to take more time to absorb a greater amount of information (i.e.: complex digital image scenery), whereby affective information is completely absent.

B. Moreover, using viewing intervals or time to **determine** affective information for a digital image constitutes not merely a detection for the presence of affective information, but yet furthermore imposes a determination as to what is the affective information and to determine this solely from the user's viewing intervals or time, does not seem possible.

For instance according to the independent claims, one would need to determine affective information "A" which corresponds to an interval of "x seconds", wherein determining affective information "B" would correspond to an interval of "y seconds". So if one views a digital image for 10 seconds: they love, but for only 3 seconds – they only like it, admire it or giddy about it! Well, which is it? Essentially the affective information has not been determined, nor can it be solely by the user's viewing intervals or time.

15. Claims 1-10 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

A. Claim 1 is anticipated by a mental process augmented by pencil and paper markings [as detailed] below.

A method for determining affective information for at least one image in an imaging system [person viewing a collection of digital sketches on paper pages], comprising the steps of: a) sequentially displaying a plurality of digital images [turning or flipping the pages] for viewing by a user; b) monitoring the viewing time for each of the plurality of digital images [indicate the passage of time for viewing each page via pencil markings for subjective counting of time]; and c) using the viewing time to determine affective information for at least one of the digital images [observe the viewer's facial changes along with the pencil markings indicating time duration of viewing that particular page coupled with the duration of the individuals facial expression to sense the viewer's emotion toward the digital sketch].

B. Claims 2-7 are anticipated by a mental process augmented by pencil and paper markings, supra for claim 1.

C. Claim 8, "The method of claim 4 wherein the degree of interest is determined for each of the plurality of digital images [viewing and facial expression durations], and is stored along with the corresponding digital image in separate digital image files [recorded by pencil and paper on a each separate page of the collection]" is anticipated by a mental process augmented by pencil and paper markings [as detailed] supra.

(Examiner's note: the natural numeral system constitutes a digit system of base ten.)

D. Per independent claim 9, this is directed to a method for performing the method of independent claim 1, and therefore is rejected to independent claim 1.

(Examiner's note: "providing affective information" lacks patentable weight, since affective information is never provided for images.)

E. Claim 10, "The method of claim 9 wherein the 1 wherein the affective information is stored in a personal affective tag [pencil markings written on the particular image sketch page]" is anticipated by a mental process augmented by pencil and paper markings [as detailed] supra for claim 9.

Claim Rejections - 35 USC § 103

16. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

17. Claims 1 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maehara, (JP 10143680 A).

A. Claims 1, 2 and 9, "A method for determining affective information for at least one image in an imaging system [To obtain a video display device in which adjustment for allowing a video to apply an emotional or sensitive feeling such as a 'sense of speed' or 'spread' to an observer can be relatively easily attained in a short time, and manufacturing costs can be reduced], comprising the steps of:

a) sequentially displaying a plurality of digital images for viewing by a user [video has an inherent specific frame rate];

b) monitoring the viewing time for each of the plurality of digital images; and c) using the viewing time to determine affective information for at least one of the digital images [This device is provided with a display 4, press type inputting equipment 5 for designating the kind of a feeling to be applied to the observer of the video, data base 6 for storing a constant corresponding to the kind of a feeling to be applied to the observer of the video, constant setting program 7 for setting a constant from both the kind of the feeling designated by the press type inputting equipment 5 and the storage content of the data base 6, and video generation condition calculating program 8 for calculating a video generation condition based on both the constant set by the constant setting program 7 and information related with a view point in a virtual three-dimensional space 1, and inputs it to a graphic program 3. Thus, a video which can apply a feeling intended by a video manufacturer to the observer of the video can be manufactured]" is disclose [as detailed].

(Examiner's note: "providing affective information" lacks patentable weight, since affective information is never provided for images.)

B. Claim 2, "The method of claim 1 further including the step of: d) associating the affective information with the at least one digital image [video inherently has at least one digital image per frame]" is disclosed supra for claim 1 and [as detailed].

18. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Maehara (Japanese Patent JP 10143680 A) as applied to claim 1 above, and further in view of Li et al., (US 2003/0063798), hereinafter Li.

A. Claim 3, "The method of claim 1 wherein the affective information provides the degree of interest of the user" is disclosed by Maehara supra for claim 1. However, Maehara does not appear to disclose "wherein the affective information provides the degree of interest of the user", but Li does in para. [0035].

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply viewing video disclosed by Maehara in combination with exciting part of watching video of game disclosed by Li, and motivated to combine the teachings because it would provide for a video summarization technique suitable for video content that includes football as revealed by Li in para. [0005].

19. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Maehara (Japanese Patent JP 10143680 A) as applied to claim 1 above, further in view of Li et al., (US 2003/0063798), hereinafter Li, as applied to claim 3 above, and further in view of Ochiai (JP 20011320743 A), hereinafter Ochiai.

A. Claim 4, " The method of claim 3 wherein the degree of interest is determined by relating the viewing time for the at least one digital image with the average viewing time for the plurality of digital images" is disclosed by Maehara supra for claim 1 and by Li supra for claim 3.

However, Maehara and Li do not appear to disclose "with the average viewing time for the plurality of digital images", but Ochiai does in Solution.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply viewing video disclosed by Maehara in combination with exciting part of watching video of game disclosed by Li, and coupled with total time disclosed by Ochiai, and motivated to combine the teachings because it would provide for a video summarization technique suitable for video content that includes football as revealed by Li in para. [0005].

20. Claims 5-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maehara (Japanese Patent JP 10143680 A) as applied to claim 1 above, and further in view of Black et al., (US 580220 A), hereinafter Black.

A. Claim 5, "The method of claim 1 further including the step of monitoring the facial expression of the user" is disclosed by Maehara supra for claim 1. However, Maehara does not appear to disclose "further including the step of monitoring the facial expression of the user", but Black does in col. 28, lns. 13-29.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply viewing video disclosed by Maehara in combination with attention level of viewers smiling or laughing as disclosed by Black, and motivated to combine the teachings because it would provide for recognizing non-rigid or deformable motion of facial features over a sequence of images as revealed by Black in col. 1, lns. 35-38.

B. Claim 6, "The method of claim 5 wherein the smile size of the user is determined for each of the plurality of digital images" is disclosed supra for claim 5.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply viewing video disclosed by Maehara in combination with attention level of viewers smiling or laughing as disclosed by Black, and motivated to combine the

teachings because it would provide for recognizing non-rigid or deformable motion of facial features over a sequence of images as revealed by Black in col. 1, lns. 35-38.

C. Claim 7, "The method of claim 6 wherein a degree of preference is determined for each of the plurality of digital images by relating the smile size corresponding to each digital image to an average smile size" is disclosed supra for claim 6. Wherein smiling or laughing corresponds to smile size.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply viewing video disclosed by Maehara in combination with attention level of viewers smiling or laughing as disclosed by Black, and motivated to combine the teachings because it would provide for recognizing non-rigid or deformable motion of facial features over a sequence of images as revealed by Black in col. 1, lns. 35-38.

21. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Maehara (Japanese Patent JP 10143680 A) as applied to claim 1 above, further in view of Li et al., (US 2003/0063798), hereinafter Li, as applied to claim 3 above, further in view of Ochiai (JP 20011320743 A), hereinafter Ochiai, and further in view of Black et al., (US 580220 A), hereinafter Black.

A. Claim 8, "The method of claim 4 wherein the degree of interest is determined for each of the plurality of digital images, and is stored along with the corresponding digital image in separate digital image files" is disclosed by Maehara, Li, and Ochiai supra for claim 4 and by Black for claim 6.

Furthermore black discloses in col. 28, lns. 13-29 at 'Output from system 4 would provide detailed feedback to networks and producers about their products' wherein inherently

implies producer's product (video images) corresponding with 'attention level of viewers' (degree of interest).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply viewing video disclosed by Maehara in combination with attention level of viewers smiling or laughing as disclosed by Black, and motivated to combine the teachings because it would provide for recognizing non-rigid or deformable motion of facial features over a sequence of images as revealed by Black in col. 1, lns. 35-38.

B. Claim 10, "The method of claim 9 wherein the 1 wherein the affective information is stored in a personal affective tag" is disclosed supra for claim 8 and furthermore by Black in col. 3, lns. 39-67. Wherein monitoring of facial feature constitutes "personal tag".

Responses

22. Responses to this action should be mailed to: Commissioner of Patents and Trademarks, Washington, D.C. 20231.

Inquiries

23. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory F. Cunningham whose telephone number is (571) 272-7784.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Bella can be reached on (571) 272-7778. The Central FAX Number for the organization where this application or proceeding is assigned is **571-273-8300**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

G F Cunningham

Gregory F. Cunningham
Examiner
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11/18/2005

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